

Remarks

The application now contains claims 6 through 9 and 16 through 21. Claims 14 and 15 have been canceled without prejudice or disclaimer.

The pending claims have been rejected under the judicially created doctrine of obviousness-type double patenting over U.S. Patent No. 6,713,185. Without in any way acknowledging or making any admission with regard to the grounds of this rejection, applicants submit herewith a terminal disclaimer. As such, it is believed that this rejection is overcome.

Claims 6-9 and 14-19 have also been rejected under U.S.C. 103(a) as unpatentable over Canterino (US 4,475,971) in view of Benoit et al. (US 5,618,630). The pending claims have been amended to focus on a key attribute of the preferred laminate-forming method of the present invention as contrasted with the methods taught by the prior art references. The goal of the inventors was to find a *commercially viable* method of forming an impact resistant safety film having *superior strength* upon impact. What they surprisingly discovered, contrary to the teachings of the prior art, was that a superior laminate could be constructed from two portions cut from a biaxially oriented polymer film and then layered such that molecular orientation direction profile of one portion does not coincide with that of the other. In some cases the portions are cut from the same polymer film web, but in others, they can be cut from different webs.

This laminate obtains efficiencies and superior results not taught or suggested by the prior art. For example, Canterino discloses only a uniaxially oriented film. It can be slit or folded down the middle to overlap, but will still suffer from the lower strength provided by overlapping uniaxially oriented layers. Uniaxially oriented layers provide strength in only one direction, and as such a laminate will be strong in only two opposing directions, not radially as is found to be desirable for general impact resistance.

Benoit et al. discloses a biaxially oriented film. However, it only envisions the complex and more costly approach of taking two primarily uniaxially oriented (minimally biaxially oriented) full film layers, forming them such that one is primarily oriented in the machine direction and the other is primarily oriented in the transverse direction, and layering the full film layers to create a cross-laminate. No portions are cut from a web or webs and cross-laminated. The Benoit et al. method requires formation of two separate types of films, unlike the present invention, which can succeed with only a single orientation profile. The Benoit et al. approach is consequently a much more cumbersome and inefficient way of achieving cross-lamination. Furthermore, because it is really a cross-lamination of primarily uniaxially oriented films, it will suffer from the drawbacks of cross-laminations of purely uniaxially oriented films, namely strength in two primary directions instead of multiple directions.

As such, both Canterino and Benoit et al. teach away from the surprising discovery of the present inventors. They do not suggest the unique approach of the present invention, and any such combination of teachings from the two patents would constitute impermissible hindsight. There is in fact no teaching or suggestion in the two patents that they be combined to achieve the unique benefits of the present invention. They do not appreciate or anticipate the benefits of the invention as presently claimed.

Claims 14-19 have been rejected under 35 U.S.C. 103(a) as unpatentable over Planeta (US 5,350,471) in view of Benoit et al. Claims 14 and 15 have been canceled, and claims 16 through 19 amended to depend from claim 6. Planeta discloses a uniaxially oriented blown film that collapses onto itself. It in no way cures the deficiencies of Benoit et al., as discussed above, and does not teach or suggest the method of laminating two cut portions of biaxially oriented film according to the present method. As such, it is submitted that this rejection is overcome.


Claims 20 and 21 have been rejected under 35 U.S.C. 103(a) as unpatentable over Canterino in view of Benoit et al., or Planeta in view of Benoit et al. and Moran (US 5,091,258). Claims 20 and 21 now depend from claim 6. For the reasons discussed

above with respect to the cited patents, it is respectfully submitted that they are patentable over the cited art. Moran is cited solely for its disclosure of adhering transparent films to glass substrates. Applicants acknowledge that this is conventional in the art, but it in no way renders obvious the unique lamination methods of claims 20 or 21.

In summary, it is believed that the presently pending claims characterize the unique distinction of a preferred lamination method of the present invention, one which was in no way taught, suggested or appreciated by the cited references. As such, applicants respectfully request that this application be passed to allowance.

Applicants request that the Examiner contact the undersigned if any issues of form or substance remain to be resolved.

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Date


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